

## Chapter-2

# SOFTWARE REQUIREMENT AND SPECIFICATION

## 2.1 INTRODUCTION

A software requirements specification (SRS) is a document that captures complete description about how the system is expected to perform. The following subsections of the Software Requirements Specifications (SRS) document provide an overview of the entire SRS.

The “SHE CREATES SPACE” is a web-based application designed to facilitate the management of handmade products, vendors, customers, and transactions. The system aims to provide a platform where customers can discover, purchase, and provide feedback on handmade products, while vendors can showcase their creations, manage orders, and receive payments. And administrative module is included to oversee the overall functioning of the platform.

### 2.1.1 PURPOSE

The Software Requirements Specification (SRS) will offer a comprehensive description of the requirements for "SHE CREATES SPACE." This document aims to ensure a thorough understanding of what the application is expected to deliver. A clear comprehension of the project and its functionalities is essential for the accurate development of the software tailored to meet the needs of the end-users. Additionally, this SRS will serve as the cornerstone of the project, providing the necessary foundation for design, development, and testing phases. With this SRS in hand, "SHE CREATES SPACE" can be designed, developed, and ultimately tested.

### 2.1.2 SCOPE

This document, which outlines every requirement for the system, is essential to the Software Development Life Cycle (SDLC). It is intended for usage by developers and will serve as the foundation for testing. Future modifications to the standards will need to go through a formal change approval procedure.

### 2.1.3 DEFINITIONS, ACRONYMS AND ABBREVIATIONS

<b>I/O</b>	Input/output
<b>OS</b>	Operating System

<b>DFD</b>	Data Flow Diagram
<b>CSS</b>	Cascading style sheet
<b>Q&amp;A</b>	Queries and Answers

<b>ADMIN</b>	The Administrator
<b>CFD</b>	Context Flow Diagram
<b>PHP</b>	Hypertext Preprocessor
<b>CPU</b>	Central Processing Unit
<b>GUI</b>	Graphical User Interface
<b>RAM</b>	Random Access Memory
<b>SQL</b>	Structured Query Language
<b>HTML</b>	Hyper Text Markup Language
<b>SRS</b>	Software Requirement Specifications
<b>IEEE</b>	Institute of Electrical and Electronic Engineering
<b>ERD</b>	Entity Relationship Diagram
<b>HTTP</b>	Hyper Text Transfer Protocol

#### **2.1.4 OVERVIEW**

The SRS is organized into two main sections. The first is The Overall Description and the second is the Specific Requirements. The Overall Description will describe the requirements of the “SHE CREATES SPACE” from a general high-level perspective. The Specific Requirements section will describe in detail the requirements of the system.

## **2.2 OVERALL DESCRIPTION**

### **2.2.1 PRODUCT PERSPECTIVE**

The proposed web application contains easy graphical interfaces to all types of users. It contains simple databases which eliminates the complications of users. This is a responsive web page i.e., it can adjust on any platform. The product is a new, self- contained product. The product provides authenticated access to the data which makes the system secure. It also provides

- Good and easy user interfaces which makes the system user friendly.
- Active workspaces for the users with many functions.

### **2.2.2 PRODUCT FEATURES**

- The project “SHE CREATES SPACE” is a user-friendly application having simple interfaces.
- Easy Registration Process.
- Display of handicraft products with detailed descriptions, images, and prices.
- Women Empowerment.
- Level of security.
- It helps the women to showcase their skills in handicrafts.

### **2.2.3 USER CHARACTERISTICS**

It is considered that the user does have the basic knowledge of operating the internet and to have access to it. The administrator is expected to be familiar with the interface of the system.

The users of the application “SHE CREATES SPACE” are:

#### **ADMIN**

- The user needs to Sign-in/Login to create a user id.
- Admin can accept/reject the vendor according to their gender.
- Admin can manage payments.
- Admin can view vendor details as well as user details.

#### **CUSTOMER**

- The user is allowed to access the services provided by admin like registering.
- Customer can view the products and also, they can provide feedbacks to the vendors.
- Customer can make request for products.
- Customer can place orders for customized products.

#### **VENDOR**

- Gender-Specific Registration.
- Vendor has the capability to view and manage their uploaded products.
- Vendor has the access of shipping and payment details.
- Vendor can view the feedbacks.

### **2.2.4 GENERAL CONSTRAINTS**

- Must be coded efficiently enough to run well on provided server hardware.

- Client-side code and/or web pages must be able to run efficiently on low end hardware.
- The database will be created and maintained in a way that makes it of reasonable and manageable size.

### **2.2.5 ASSUMPTIONS AND DEPENDENCIES**

- The system is not required to save generated reports.
- Users must enter a valid login id and password to use this web application.
- It can be accessed over the Internet.

## **2.3 SPECIFIC REQUIREMENTS**

### **2.3.1 EXTERNAL INTERFACE REQUIREMENTS**

The “SHE CREATES SPACE” system will use the standard input/output devices for a personal computer. This includes the following:

- Keyboard
- Mouse
- Monitor
- Printer

### **2.3.2 USER INTERFACE**

- To make this application useful for maximum reach of users we have created very user-friendly interfaces so that any kind of user with very less computer skill can use this system.
- The system provides a user-friendly GUI to the users.
- An error message is raised when invalid performance occurs.

### **2.3.3 HARDWARE INTERFACE**

- Processor: Intel core i3 or higher
- RAM: 4GB and above
- Hard disk Utilization: 4GB and above
- Input Devices: Mouse, Keyboard
- Output Devices: Monitor, Printer

### **2.3.4 SOFTWARE INTERFACE**

- Browser: Internet Explorer, Google chrome, Mozilla Firefox.

- Server: Xampp Server.
- Editor: Visual Studio Code

### 2.3.5 COMMUNICATION INTERFACE

The communications functions required by this product are LAN connections within the whole company so that the users can interact with each other.

### 2.3.6 FUNCTIONAL REQUIREMENTS

#### ADMIN

- **Login:** Admin will enter the website using username and password.
- **Accept/Reject Vendor:** Admin can accept/reject the vendor according to their gender.
- **View Vendor:** Admin can view the vendor.
- **View Customer:** Admin can view the user.
- **View Payment:** Admin can view the payment made by the user.

#### CUSTOMER

- **Registration:** Enables individuals in need of any handmade products to register as recipients.
- **Login:** User can login using his/her username and password.
- **View Products:** User can view the updated products.
- **Feedback:** User can send the feedback to the vendors.
- **Make a Request:** User can make request for products.
- **Purchase (Address Info):** User can purchase products by giving a specified address.
- **Payment:** User can use COD (Cash on Delivery) for payments.

#### VENDOR

- **Registration:** Only female vendors can register.
- **Login:** Vendor can login using her username and password.
- **Upload:** Vendor can upload their products.
- **View Uploads:** Vendor can view their uploaded products.
- **View Purchase:** Vendor can view the purchase details.
- **View Payment:** Vendor can view the payment details.
- **View Feedback:** Vendor can view feedbacks provided by users.

- **View Product Request:** Vendor can view products requested by users.
- **View Shipping:** Vendor can view the shipping details

### 2.3.7 DATABASE DESIGN

#### 2.3.7.1: Table Name: admin

Column Name	Data Type	Constraints
a_id	int(10)	Primary key
a_name	varchar(50)	Not null
a_email	varchar(100)	Not null
a_password	varchar(250)	Not null
a_profile	varchar(300)	Not null

#### 2.3.7.2: Table Name: vendors

Column Name	Data Type	Constraints
v_id	int(12)	Primary key
v_name	varchar(150)	Not null
v_email	varchar(250)	Not null
v_password	varchar(250)	Not null
v_gender	varchar(50)	Not null
v_idcard	varchar(350)	Not null

v_phone	bigint(12)	Not null
v_address	varchar(300)	Not null
v_created_date	date	Not null
v_updated_date	date	Not null
v_status	varchar(250)	Not null

#### 2.3.7.3: Table Name: customer

Column Name	Data Type	Constraints
c_id	int(10)	Primary key
c_name	varchar(50)	Not null
c_email	varchar(100)	Not null
c_password	varchar(250)	Not null
c_phone	bigint(12)	Not null
c_address	varchar(200)	Not null
c_profile	varchar(200)	Not null
c_created_date	date	Not null
c_updated_date	date	Not null
c_staus	varchar(100)	Not null

#### 2.3.7.4: Table Name: product

Column Name	Data Type	Constraints
p_id	int(12)	Primary key
p_name	varchar(50)	Foreign Key
p_description	varchar(500)	Not null
p_image	varchar(350)	Not null
v_id	int(10)	Not null
p_price	decimal(40,0)	Not null
p_created_date	date	Not null
p_updated_date	date	Not null
p_status	varchar(200)	Not null
ct_id	int(12)	Foreign key
pupdate	date	Not null

#### 2.3.7.5 Table Name: orders

Column Name	Data Type	Constraints
or_id	int(10)	Primary key
or_date	date	Not null



p_id	int(10)	Foreign key
c_id	int(10)	Foreign key
or_amt	decimal(40,0)	Not null
or_qty	int(100)	Not null
or_address	varchar(250)	Not null
or_updated_date	date	Not null
or_status	varchar(500)	Not null

#### 2.3.7.6 :Table Name: category

Column Name	Data Type	Constraints
ct_id	int(11)	Primary key
ct_name	varchar(250)	Not null
ct_created_date	date	Not null
ct_updated_date	date	Not null
ct_status	varchar(200)	Not null
cf_id	int(10)	Foreign key

#### 2.3.7.7: Table Name: cart

Column Name	Data Type	Constraints
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cr_id	int(10)	Primary key
p_id	int(10)	Foreign key
c_id	int(10)	Foreign key
cr_qty	int(200)	Not null
cr_date	date	Not null
cr_status	varchar(250)	Not null

#### 2.3.7.8: Table Name: craft\_type

Column Name	Data Type	Constraints
cf_id	int(12)	Primary key
cf_name	varchar(150)	Not null
cf_created_date	date	Not null
cf_updated_date	date	Not null
cf_status	varchar(200)	Not null

#### 2.3.7.9: Table Name: feedback

Column Name	Data Type	Constraints
f_id	int(10)	Primary key

orr_id	int(10)	Foreign key
f_date	date	Not null
f_feedback	varchar(500)	Not null

#### 2.3.7.10: Table Name: payment

Column Name	Data Type	Constraints
py_id	int(10)	Primary key
py_date	date	Not null
or_id	int(10)	Foreign key
py_ttlamt	decimal(40,0)	Not null
py_admin_amt	decimal(40,0)	Not null
py_vendor_amt	decimal(40,0)	Not null
py_updated_date	date	Not null
p_status	varchar(250)	Not null

#### 2.3.7.11 Table Name: customize

Column Name	Data Type	Constraints
cs_id	int(10)	Primary key

p_id	int(10)	Foreign key
cs_reference	varchar(250)	Not null
cs_description	varchar(500)	Not null
cs_qty	int(50)	Not null
cs_amount	decimal(50,0)	Not null
cs_requested_date	date	Not null
cs_updated_date	date	Not null
cs_status	varchar(250)	Not null

#### 2.3.7.12 :Table Name: customize\_payment

Column Name	Data Type	Constraints
cpy_id	int(10)	Primary key
cpy_date	date	Not null
cs_id	int(10)	Foreign key
cpy_ttlamt	decimal(40,0)	Not null
cpy_advance	decimal(40,0)	Not null
cpy_balance	decimal(40,0)	Not null
cpy_admin_amt	decimal(40,0)	Not null
cpy_vendor_amt	decimal(40,0)	Not null

cpy_updated_date	date	Not null
cpy_status	varchar(250)	Not null

### 2.3.8 PERFORMANCE REQUIREMENTS

Performance requirements define acceptable response times for system functionality.

- The load time for user interface screens shall take no longer than two seconds.
- The log in information shall be verified within five seconds.
- Queries shall return results within five seconds.

### 2.3.9 DESIGN CONSTRAINTS

The “SHE CREATES SPACE” system shall include three categories of admin, user and vendor and it runs in a Windows environment. The system shall be developed using PHP and MySQL databases.

#### 2.3.9.1 SYSTEM ATTRIBUTES

- **Reliability:** Specify the factors required to establish the required reliability of the software system at time of delivery.
- **Availability:** The system shall be available during normal operating hours.
- **Security:** Access to the various subsystems will be protected by a user log in screen that requires a user name and password.
- **Portability:** The system shall run in any Microsoft Windows environment that contains Wamp server and the Microsoft SQL database.

## 2.4 OTHER REQUIREMENTS

### 2.4.1 SAFETY REQUIREMENTS

- In case the user forgets or loses Password, the repair functionality helps by choosing the “forgot password” option in the main login window.

- If the caps lock is on it must be notified.
- Consistency: Checking the fact that all clients must be attached to one server, so there is an appropriate control of the information.
- Authorization: Checking for the entity and providing features for them.

#### **2.4.2 SECURITY REQUIREMENTS**

The proposed website is a secured handicraft management website “SHE CREATES SPACE”. This website prioritizes several key security measures to safeguard sensitive data and protect against cyber threats. This ensures the safety and privacy of vendors and users, fostering a trusted and empowering online environment.

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